

Howland
~~Memoranda~~

Dulmer

SIC 15
Howland
15-20 Sept
1966

✓ ADP
Red-t. Tropicbird

✓ ADP
Done CPH

10 Arrived Sept. 15-1800
Sept 16 ~~0700~~ Depart
5 { Depart Sept. 18-1800
5 { Arrive Sept. 19
Depart Sept 20

Sept. 15 1966 Howland

Sooty Tern Recoveries

~~953-96167~~ - chick

~~96101~~ u

~~793-7547~~

✓ 773 21175 Ad

~~953-96104~~ c

~~Lesser Frigatebird~~

~~777-52241~~

15 Sept 1966

Howland

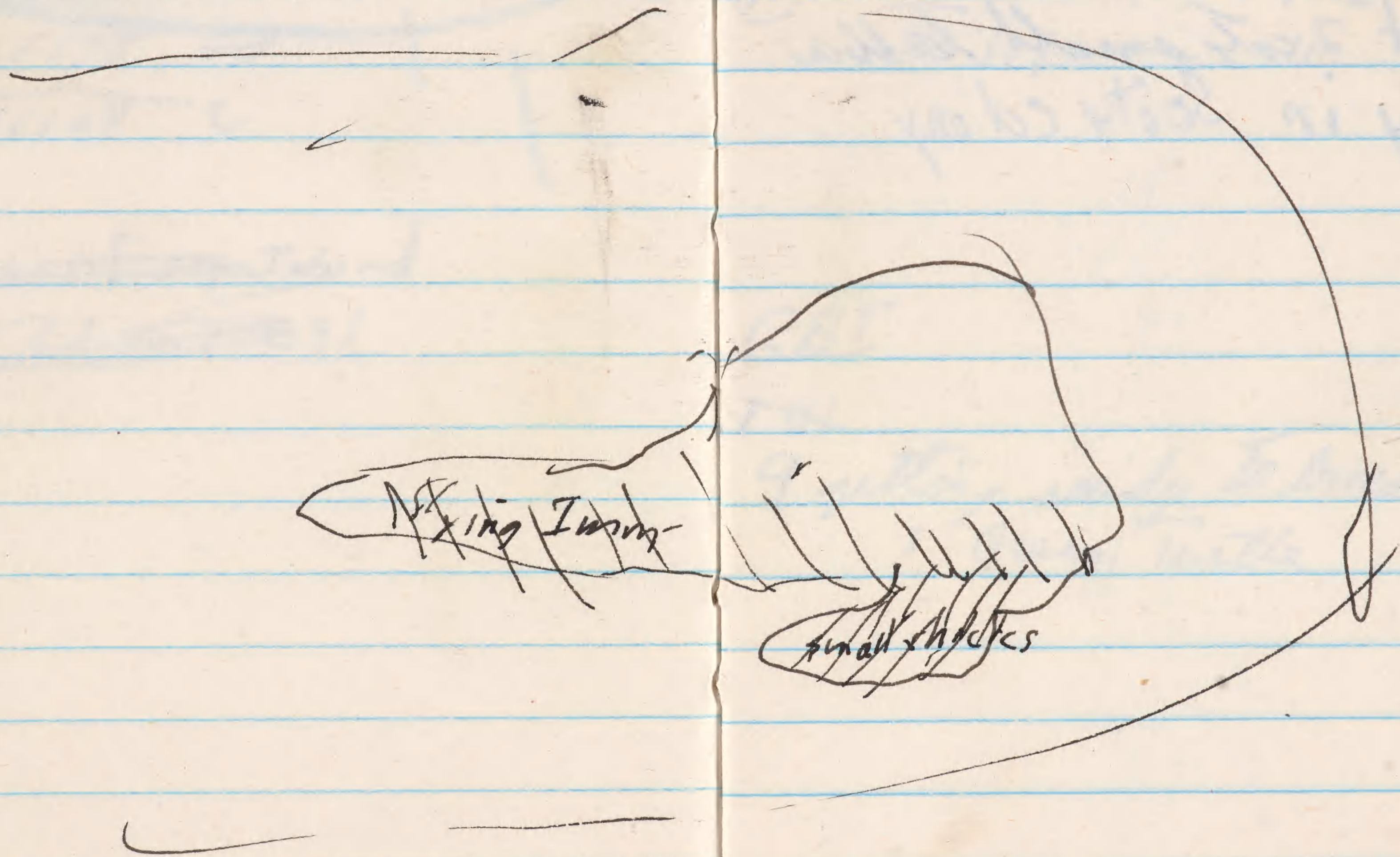
Recoveries

Lesser Frigatebird

777-52241

777 51629

Howland Sooty Tern
6 in on ~~at~~ hills



15 Sept

1 Noddy in Colony

1 curlew

1 G.P

3 Turnstone

1 cat + 2 cat small Tabbles

1 noddy in Sooty colony

16 sept Shorebird Count

Bth C	G.P.	W.T.	RT	C.N.
IIII	IIII	IIII	IIII	1
III	IIII	IIII	IIII	(6)
(II)	IIII		IIII	
	III		II	

GRT

~~IIII~~

9 getting ready to breed (swirling)
1 Green Turtle

BFB Booby Hauland 16 Sept

#	99	2	141	Skipped
111	111		111	
(15)	(19)		(7)	
8	28		4	
<hr/> 26	<hr/> 50		<hr/> 14	

26
14

90
11

101
206
101

408

Small died

11	1111	1111
5	1111	1111
4	1111	1111
<hr/> 11	1111	1111
	(87)	
	94	
	25	
	<hr/> 206	

1111	
1111	
1111	
(30)	
56	
15	
<hr/> 101	

F.m.

BB

16 Sept

Eggs 1 egg S. chick 2. chick Imm

11

1111

1

1111

111

1111

1

3 eggs

111

16 Sept Bands Received

863-53001-53500

~~53500 - 55000~~
Returned

not used

16 Sept 1966
Chicks
Sooty Tern V Banded
863-53001-53500
+ streamer

Tropic bird

Howland Is.

17 Sept

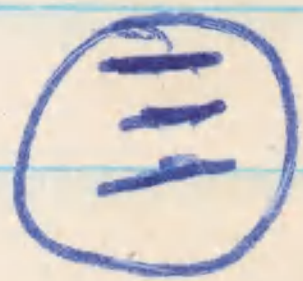
1 - empty

31 - 11

4 - "

5 - "

6 - ~~6~~ chick imm



9 - empty

8 - ~~chick~~ imm

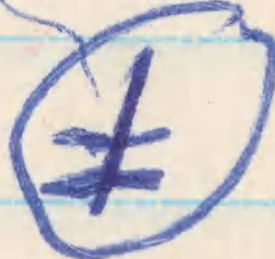
35 - empty

7 - ~~chick~~ imm

43 - empty

44 - Imm

34 - L. Chick

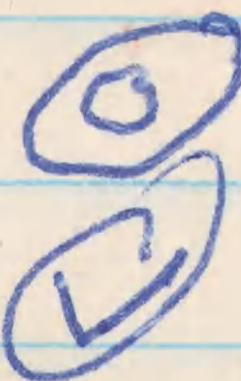


37 - empty

12 - "

39 - empty

38 - "



on nothing

14 - L. chick

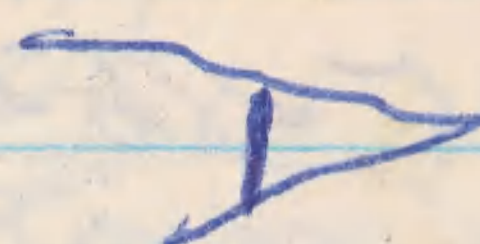
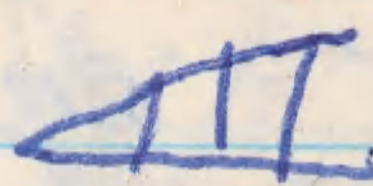
15 - imm

40 - L. chick

17 - imm

45 - empty

16 -



20 - imm

42 - empty

18 - "

26 - imm

41 - empty

W on nothing

46 - empty

27 - "

24 - "



47 - egg

25 - empty

28 - "

48 - Imm

49 - imm

64 = 90'

✓ADP

Sept 17 1966
Red-tailed
Tropic bird Returns Howland

~~825-88742 - 5 chick~~

625-86205 - egg ✓

✓86215 - egg ✓

✓85740 ✓

✓85750 - L chick ✓

✓86235 - L chick ✓

645-23324 - empty - (6)

625-88213 - L. chick ✓

595-64018

-64015 ✓

-64008 ✓

625-85770 - Imm ✓

✓85755 - egg ✓

Sept. 17 1966

New bands

Red-Tailed Tropicbird

615-11403 - egg

11404 - "

11405 - Imm

11406 - Ad pr. with #16

11407 - egg

11408 - Imm

11409 - egg

11410 - 5. chick

New Bands

17 Sept 1966

615 - 11403 - 11410

ATAPIS
10/15/15
10/15/15

7997-17
Banks - 10/15/15
10/15/15 - 10/15/15
10/15/15 - 10/15/15

10/15/15 - 10/15/15
10/15/15 - 10/15/15
10/15/15 - 10/15/15
10/15/15 - 10/15/15

Sept. 17

Bands Received

737-81601-81700

81801-82000

17 Sept. 1966

737-81601-81700

81801-82000

Total 300 Bands Used

17 Sept 1966 Banding
Howland

Lesser Frigate Ad ♀ on egg

737-81861-81888 ↓

81888-81900-imm

17 Sept. 1966

Lesser Frigate Ad ♀/egg

737-81861-81886

Lesser Frigate immatures

737-81887-81900

Total - 39 Bands Used

17 Sept 1966 Howland.
Lesser Frigate

~~Return~~

~~777-5162-5 ♀ egg~~

Pterodroma hypoleuca - 2 B. 2 BW

P. leucoptera - 2

P. cooki - 2

P. externa - 2

P. neglecta - 1

~~*P. bulleri*~~ +

P. rostrata 1

P. alba - 4

P. inexpectata - 1

Bulweria bulweria - 4

Puffinus pacificus - 2 d 2 L

P. nativitatis - 4

P. tenuirostris - 2

P. griseus - 2

P. carneipes - 2

P. puffinus - 2

P. lherminieri - 2

P. bulleri - 1

Oceanodroma markhami - 4

O. castro - 2

O. leucorhoa

1. *Phlox pilularis* Nutt.

2. *Phlox subulata* Mill.

3. *Phlox paniculata* L.

4. *Phlox maculata* L.

5. *Phlox divaricata* L.

6. *Phlox ovata* L.

7. *Phlox longifolia* Nutt.

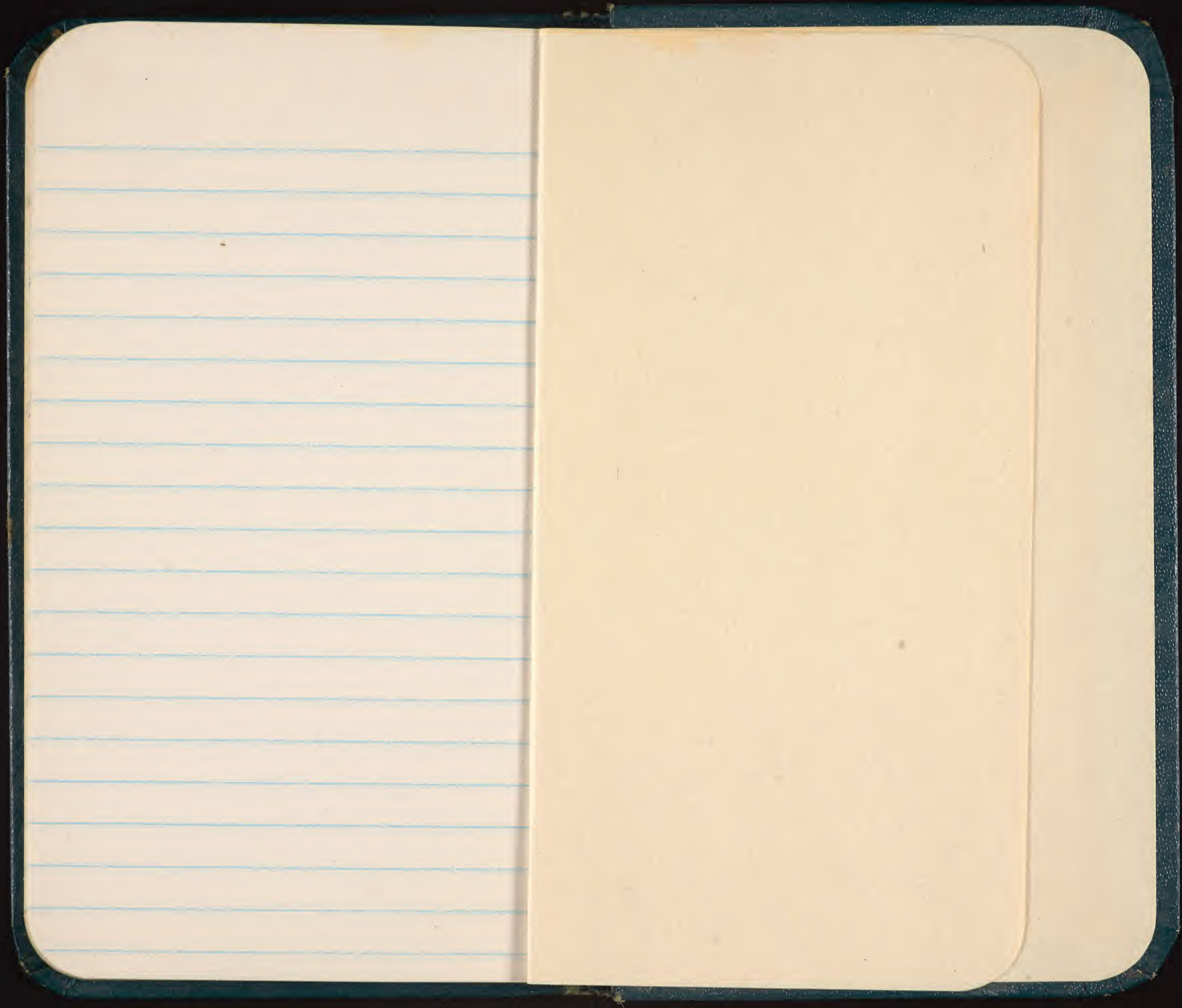
8. *Phlox pilularis* Nutt.

9. *Phlox pilularis* Nutt.

10. *Phlox pilularis* Nutt.

11. *Phlox pilularis* Nutt.

12. *Phlox pilularis* Nutt.





7530-222-0078
FEDERAL SUPPLY SERVICE

GPO 64-16-78124-2

Howland

Memorandum

Chandler

SIC #75
Howland
15-20 Sept 1966

✓ ADP
CPA

Done 12/21/68

✓

15 SEPT
1906
SHOULDER

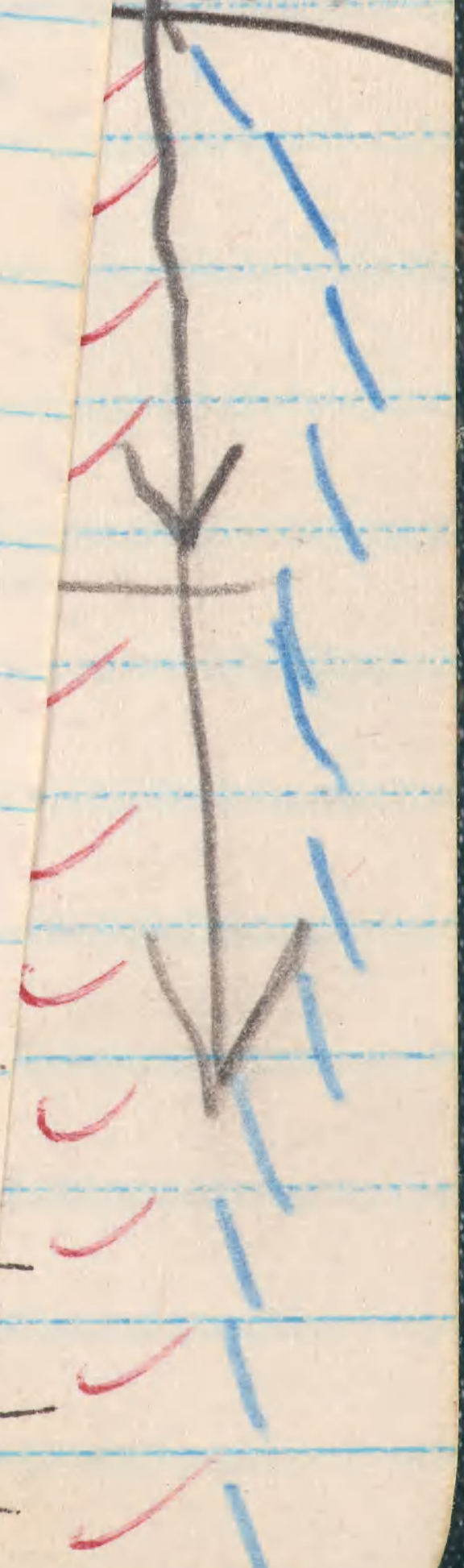
LAND 1.000

3 RT 2000 1000

1 GP

ST Ad. 1000 1000

OVER 4



✓ADP

15 SEPT
1906
CHANDLER

LAND 1800

3 RT OVER CAMP

1 GP " "

grass along beach
coming back

96

ST. Ad STREAMER RECOVERY

~~953-06265~~ ✓

ST CHICK " ~~95385~~ ✓

" " ~~96185~~ ✓

" " ~~96762~~ ✓

~~Ad Ad~~

CHICK " ~~01855~~ ✓

" " ~~95099~~ ✓

" " ~~95269~~ ✓

" " ~~95020~~ ✓

" " ~~96909~~ ✓

" " ~~96279~~ ✓

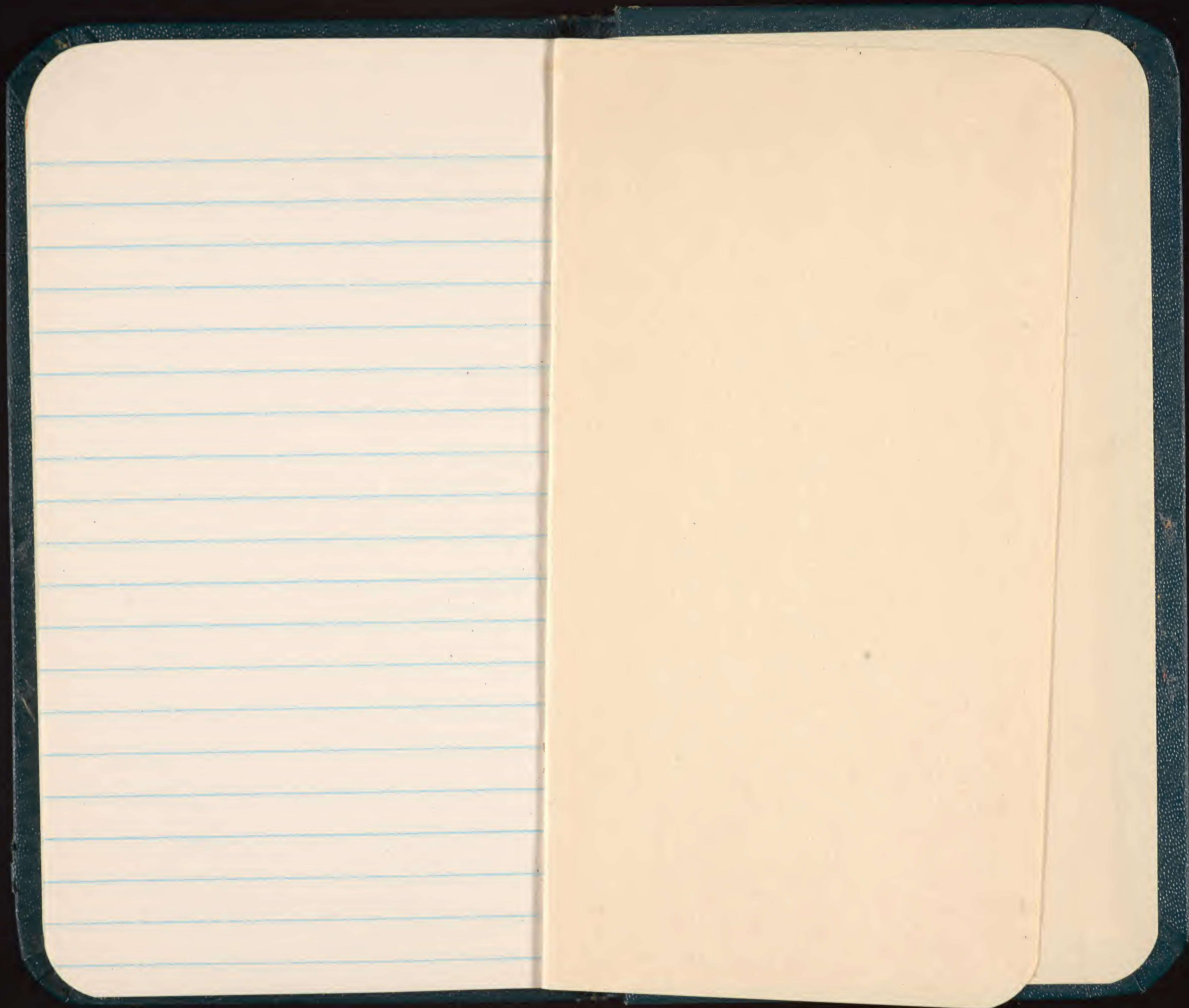
~~95389~~ ✓

SEP 15

66

RT1 ON GROUND INTERVCA
BTC 2 over camp

1950





7530-222-0078
FEDERAL SUPPLY SERVICE

GPO 648-16-73124-2

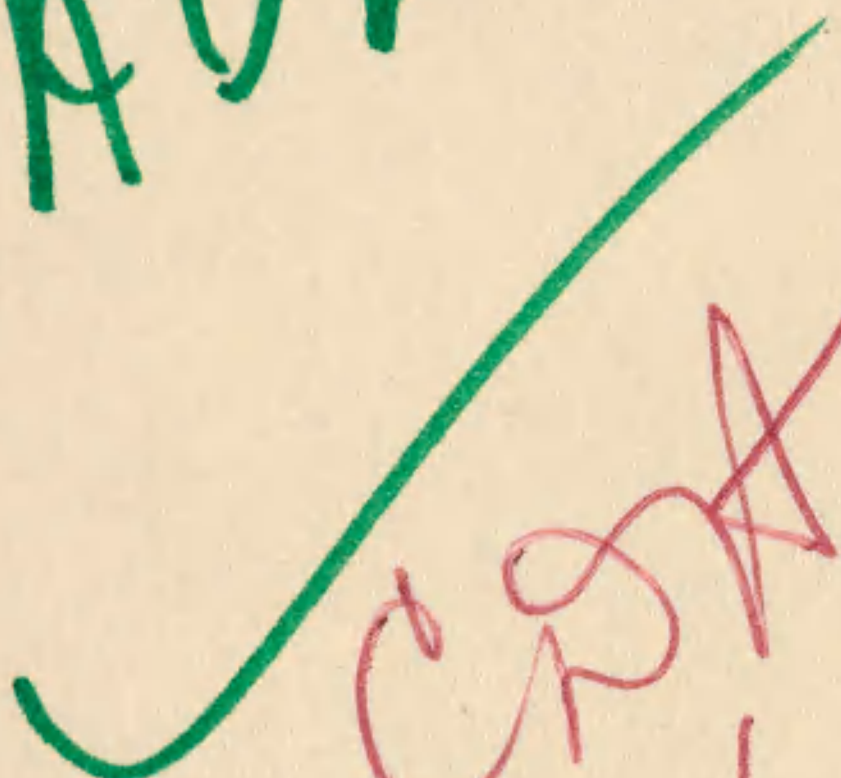
Howland
Memoranda

Fitch

SIC 15
Howland
15-20 Sept 1966

John H. Fitch
SIC # 15

NO ADD

COPIES
Done 8/16/68

BANDS ISSUED

16 September Nocturnal Banding

863-52001-52500 used

17 September Nocturnal Banding

Bands issued to Walter Bulmer

BANDS ISSUED

Page 1

NEW BANDINGS

16 September 1966

1.) 863-52001-52500 Imm. Sooty Terns

17 September 1966

2.) 737-81601 ♀ on egg Lesser Frigate
" "

02 ♀ on small chick

03 ♀ sitting next to chick " "

04 ♀ on small chick " "

05 ♀ on egg " "

06 ♀ on egg " "

07 ♂ on egg " "

08 ♀ with naked chick " "

09 ♂ with chick " "

10 ♀ with chick " "

11 ♀ sitting next to chick " "

12 ♂ on small chick " "

13 ♀ on egg " "

14 ♀ sitting 1 ft. from chick " "

15 ♂ on egg " "

16 ♂ on egg " "

17 ♂ on chick " "

18 ♀ on egg " "

NEW BANDING17 September (continued) 1966

737-81619	♂	with chick	Lesser Frigate
"	20	♂ on egg	" "
"	21	♂ on egg	" "
"	22	♂ on egg	" "
"	23	♂ on egg	" "
"	24	♀ on egg	" "
"	25	♂ on egg	" "
"	26	♀ on small chick	" "
"	27	♂ on egg	" "
"	28	♂ on egg	" "
"	29	♀ on small chick	" "
"	30	♂ on egg	" "
"	31	♂ on egg	" "
"	32	♀ on egg	" "
"	33	♂ on naked chick	" "
"	34	♂ on egg	" "
"	35	♀ on egg	" "
"	36	♂ on egg	" "
"	37	♀ on naked chick	" "
"	38	♂ on egg	" "

17 September (continued) 1966

737-81639	♂	on naked chick	Lesser Frigate
40	♀	on egg	" "
41	♂	on egg	" "
42	♀	on egg	" "
43	♂	on egg	" "
44	♀	on egg	" "
45	♀	on egg	" "
46	♂	on naked chick	" "
47	♂	on egg	" "
48	♂	on egg	" "
49	♀	on egg	" "
50	♀	on egg	" "
51	♂	on egg	" "
52	♂	with chick	" "
53	♂	on egg	" "
54	♀	on egg	" "
55	♂	on egg	" "
56	♂	on egg	" "
57	♀	on egg	" "
58	♀	on chick	" "

17 September (continued) 1966

737-81659	♂	on egg	Lesser Frigate
60	♂	on egg	" "
61	♀	on egg	" "
62	♀	on egg	" "
63	♀	on egg	" "
64	♂	on egg	" "
65	♂	on egg	" "
66	♀	on egg	" "
67	♀	with chick	" "
68	♀	on naked chick	" "
69	♂	on naked chick	" "
70	♀	on naked chick	" "
71	♂	on egg	" "
72	♂	on hatching egg	" "
73	♀	on chick	" "
74	♀	on egg	" "
75	♂	on egg	" "
76	♂	sitting near large chick	" "
77	♀	on egg	" "
78	♂	on egg	" "

NEW BANDING17 September (continued) 1966

737-81679 ♀ on egg Lesser Frigate

80 ♀ on egg " "

81 ♂ on egg " "

82 ♀ on egg " "

83 ♀ sitting ^{chick} near " "

84 ♂ on egg " "

85 ♂ on egg " "

86 ♀ on egg " "

87 ♂ on naked chick " "

88 ♂ on egg " "

89 ♀ on egg " "

90 ♂ on egg " "

91 ♂ with chick " "

92 ♀ with naked chick " "

93 ♂ on egg " "

94 ♀ on egg " "

95 ♂ on egg " "

96 ♀ with naked chick " "

97 ♂ on egg " "

98 ♀ on egg " "

NEW BANDING17 September (continued) 1966

737-81699 ♀ on egg Lesser Frigate

737-81700 ♀ on naked chick " "

3) 737-81801-30 ♂ on egg " "

19 September Howland Island

NEW ZEALAND

17th Dec 1911 (1st Dec 1911)

18th Dec 1911 (2nd Dec 1911)

19th Dec 1911 (3rd Dec 1911)

20th Dec 1911 (4th Dec 1911)

21st Dec 1911 (5th Dec 1911)

22nd Dec 1911 (6th Dec 1911)

23rd Dec 1911 (7th Dec 1911)

24th Dec 1911 (8th Dec 1911)

25th Dec 1911 (9th Dec 1911)

26th Dec 1911 (10th Dec 1911)

27th Dec 1911 (11th Dec 1911)

28th Dec 1911 (12th Dec 1911)

29th Dec 1911 (13th Dec 1911)

30th Dec 1911 (14th Dec 1911)

31st Dec 1911 (15th Dec 1911)

1st Jan 1912 (16th Dec 1911)

2nd Jan 1912 (17th Dec 1911)

3rd Jan 1912 (18th Dec 1911)

4th Jan 1912 (19th Dec 1911)

5th Jan 1912 (20th Dec 1911)

6th Jan 1912 (21st Dec 1911)

Brown Booby

Blue-faced Booby

Sooty Terns

Bristle Thighed Curlew

16 Sept. 66 Howland

One flushed from Tribulus - ~~Erigeron~~ ^{Boerhaavia}

type situation in N. end Island, another
flushed same area. Bob Tuxson and

Chris Thompson report sighting 3.

Lesser Frigatebirds

16 Sept. Several swirls observed both over Island and over Ocean. Main colony located in middle of island just south of Lighthouse

17 Sept. 1800 ♂ seen chasing adult Sooty Tern over beach near camp. Main colony visited tonight and a number of adults banded. - 400 banded. Estimated no. of adults on island: 8000

Mammal Survey of Howland

15 Sept. 1966 Northwest part of island -
~~cat~~ sighted at night about 9:30 P.M.

16 Sept. 1966 2 Skeletons of cats
discovered - one ~~cat~~ skull had
holes in it, other cat apparently
died a natural death. Frank
Smith sighted a mouse (Mus musculus?)
in Sooty Tern colony on North
central part of Howland. It
ran into a burrow soon after
he saw it in Tribulus-Boerhaavia
habitat.

Sept. 20 1966 Paul Woodward reports
sighting a cat this morning.
Mouse traps (10 each time) were
set out on the 17th and 19th but
with no luck

Lizard Survey Howland

15 September 1966 A number of
skinks and geckos sighted; former
mainly Abdelopus and latter mainly
Mourning Gecko. In a brief survey
of N.W. part of island a total of
52 herps (31 geckos and 21 skinks)
were sighted. 2 geckos and later 2
more were collected off Emelia Erhart
Memorial lighthouse and 1 skink off
ruins of the old town.

16 Sept. 1966 Several skinks were
collected and a number observed during
a booby survey of the Northern part of
the Island. A number of skinks were
seen on the lighthouse.

Identification - Plants

Lepturus repens: grass with spikes

Digitaria pacifica: grass-hairy leaves

Fimbristylis cymosa - sedge

Fleurya ruderalis - erect herb ^{stalks} flower

Boerhaavia tetrandra: vine like herb

Pisonia: massive trunk soft wood ^{flowers}

Portulaca: robust stems + large yellow

^{white flower?}
Sesuvium: tangled mat fleshy stems - ^{clots} flowers

Tribulus: trailing herb-silky leaves, yellow

Euphorbia: low herbs

~~Ipomoea~~ Ipomoea - flowers

Messerschmidia: tree - rosette leaves

Scaevola: coarse branching shrub

Gekkonidae

Lepidodactylus lugubris : Mourning Gecko

Snout-vent : 44 mm. tail 41 mm.
Small, pale - black spots, chin shield
Granular near rim - throat pouches

Hemiphyllodactylus typus : Tree Gecko

Snout-vent : 60 mm. tail : 60 mm.
brown w. white spots, no chin shields

Gehyra mutilata : Stump-toed

Elongate chin shields, divided lamellae
transverse plates, pale w large
dark eyes.

Hemidactylus garnoti

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GPO 643-16-73121-3